



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Frerichs GROUP: Not yet assigned
SERIAL NO: 10/719,648 EXAMINER: Not yet assigned
FILED: November 21, 2003
FOR: SENSOR FOR MEASURING A GAS CONCENTRATION
OR ION CONCENTRATION

FIRST PRELIMINARY AMENDMENT

Please amend the above-identified application as follows:

IN THE CLAIMS:

Amend claims 1-9 as follows:

1. (Currently Amended) Sensor for measuring a gas concentration or ion concentration,
comprising ~~having~~:

- a substrate ~~(11)~~ of a first charge-carrier type;
- a drain ~~(3)~~ of a second charge-carrier type fashioned on the substrate;
- a source ~~(2)~~ of the second charge-carrier type fashioned on the substrate;
- a channel region ~~(4)~~ of the substrate, which is arranged between the drain ~~(3)~~ and the
source ~~(2)~~;
- a conductive guard ring ~~(1)~~, ~~which is~~ arranged outside the channel region;
- a sensitive gate layer ~~(8)~~ whose potential depends on an ambient gas concentration or ion
concentration, there being an air gap ~~(1)~~ between the gate layer ~~(8)~~ and the channel region ~~(4)~~,
characterized in that between the guard ring ~~(1)~~ and the channel region ~~(4)~~ there is fashioned an